# Maths

## Maths Intent Statement

The intent of our Mathematics curriculum at Bromley Trust Academy Midfield is to deliver a curriculum, which is accessible to all, appropriately challenging and will maximise the development of every pupil's ability and academic achievement.

We deliver lessons that are creative and challenging, using a range of stimuli to engage the pupils and allow them to make links between their learning and everyday real-life situations. Our curriculum aims to help pupils to gain an enjoyment of maths through a growing self-confidence in their ability. We want our pupils to make rich connections across mathematical ideas to develop fluency, reasoning and competence in solving increasingly sophisticated problems.

Maths Talk plays a key role in every Maths lesson. We understand that the way pupils speak and write about mathematics transforms their learning so we plan carefully sequenced and structured vocabulary to ensure that the children can not only say what the answer is, but to understand and explain how they know it is right. Key vocabulary is introduced at the start of every lesson and pupils are presented with numerous opportunities to read, write, and discuss this vocabulary.

We ensure that the pupil's strategies for calculation, progress alongside the content and provide opportunities to notice patterns to solve problems and to choose an efficient strategy and use their mathematical language to reason about the answer. We intend for our pupils to be able to apply their mathematical knowledge to other subjects as well as to maximise their enjoyment and curiosity about the subject. We provide many opportunities for pupils to develop resilience through investigations so that they can reason, and problem solve with perseverance and enthusiasm to develop a mindset to accept and embrace challenge.

#### Implementation

Across the school, we ensure learning is cumulative and progressive by following the White Rose yearly coverage overviews. Although we ensure full coverage of the National Curriculum requirements, teachers will use their knowledge of the pupils to ensure the content is matched closely to the children's needs and interests and pitched to be appropriately challenging while developing their confidence and supporting consolidation. We do this by using a range of exciting and age-appropriate stimuli and resources to inspire the learning, including picture books, Number Blocks and real-life investigations and situations, to ensure maths is purposeful and enjoyable.

Lessons are carefully planned to ensure links between maths concepts are made when appropriate and there are opportunities to rehearse previously learnt concepts through regular retrieval practice. Pupils are supported in their learning through the Concrete, Pictorial, and Abstract ways of learning which is the approach which underpins the White Rose Maths scheme. Through the Maths talk elements of the lesson, mathematical vocabulary is taught explicitly, and children are given regular opportunities to talk about maths and rehearse the newly taught vocabulary. We adapt our curriculum pathways to ensure that we are effectively managing gaps in learning while providing new learning and challenge. We adapt our overviews as we progress through the year through constant monitoring and review to ensure that we are moving at the appropriate pace for the pupils so that they make the best possible progress. We also teach mixed year group planning to ensure that all pupils are accessing the correct level of challenge and that we are addressing gaps in learning so that we can build on existing concepts. In our class of youngest pupils we review every half term to ensure we are supporting the progress towards the National Curriculum from the EYFS framework, this means adapting both frameworks to create an appropriately pitched, bespoke curriculum that moves at the right pace for our pupils, to fully embed the foundations of Maths. Many of our pupils arrive at BTAM working behind age related expectations (ARE) and so we work at a pace which enables pupils to progress quickly and work towards closing the gap, however, our careful class organisation also facilitates us to be able to challenge pupils who are working at and beyond ARE – every pupil experiences challenge!

Pupils are presented with a Challenge Star activity in every lesson which requires them to demonstrate a secure understanding of what they have just learnt.

We follow the White Rose Maths Progression, in line with the National Curriculum, this can be viewed <u>here</u>.

The yearly overviews showing the coverage of the curriculum can be viewed by clicking here.

## Intended Impact

Pupils know how and why maths is used in the outside world and in the workplace. They know about different ways that maths can be used to support their future potential and that it is a valuable life skill. Mathematical concepts and skills are mastered when a pupil can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.

Pupils confidently use a range of strategies and resources and make connections between mathematical concepts. Pupils make good progress as measured from their individual starting points and develop confidence to try new things, discuss their ideas and know that it is okay to make mistakes, as this is part of the learning process. Pupils show pride in the presentation of their work and see themselves as able mathematicians

#### How Parents and Carers can support at home

Parents and Carers can access free workbooks online to support their children with further learning and consolidation. These can be downloaded from the White Rose Maths website <u>here</u>.

You could also ask your class teacher if you would like us to print a copy for you and we can advise the level of challenge which is right for your child.